REMARKS

Docket No.: 4845-0101PUS1

Page 15 of 29

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 84-122 are now present in this application. Claims 84, 86, 103, 105, 109, 112, 114-115, and 119-121 are independent. By this Amendment, claims 84, 86, 96-98, 103, 105, 106, 109-110, 112, 114-116 and 119-122 are amended. No new matter is involved.

Reconsideration of this application, as amended, is respectfully requested.

Rejection Under 35 U.S.C. § 112, 1st Paragraph

Claims 84-122 stand rejected under 35 U.S.C. § 112, 1st Paragraph for failing to comply with the written description requirement. This rejection is respectfully traversed.

The rejection is based on the premise that claims 84, 103, 105, 109, 112, 114, 115 and 119-121 "recite 'over' and 'greater than' certain percentages, thus indicating the end of the range as up to 100%." The Office Action than indicates that there is no basis in the originally fined disclosure for ranges of up to 100% for crude protein, RUP of the crude protein, methionine and lysine.

Applicants respectfully disagree with the fundamental premise of this rejection, i.e., that by reciting, in the claim preamble, a product having a crude protein level of over about 30% of the product composition, that the end range of crude protein that is claimed is 100%.

Applicant's written description has clear support for "a crude protein level of over about 30% of the product composition," a fact which is not challenged in the rejection.

The only way that Applicant can reasonably be considered to be claiming up to 100% crude protein, for example, is if the claims actually said that, and none of these claims actually say that.

Moreover, claims are interpreted by one of ordinary skill in the art and no one of ordinary skill in the art can reasonably construe the pending claims as claiming crude protein levels or RUP of the crude protein or methionine or lysine levels up to 100% of the product composition.

Furthermore, the Court of Customs and Patent Appeals, a predecessor to the Court of Appeals for the Federal Circuit, has held "that a claim may be broader than the specific

embodiment disclosed in a specification is in itself of no moment." *In re Rasmussen*, 650 F.2d 1212, 1215, 211 USPQ 323,326 (CCPA 1981). This case was cited in <u>Ralston Purina Company v. Far-Mar-Co., Inc.</u>, 227 USPQ 177 (Fed. Cir. 1985), which indicated that the open ended range claims of U.S. patent 3,940,495 were proper and were supported by the description of a parent application. Additionally, the Court of Customs and Patent Appeals stated, in *In re Smythe and Shamos*, 178 USPQ 279 (CCPA 1073) that mere omission of claim limitations does not suggest omission of steps or part. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejection Under 35 U.S.C. § 112, 2nd Paragraph

Claims 87, 96, 106, 110, 116 and 112 stand rejected under 35 U.S.C. § 112, 2nd Paragraph. This rejection is respectfully traversed.

The Office Action indicates that by reciting "RUP is increased in a range from about 27% to about 83%" is unclear because it is not clear what RUP feed source is increased and what the initial amount of RUP is increased.

Applicants pointed out in the Amendment filed on 7, 2006 that basis for the ranges set forth in the claims is found throughout Applicants' originally filed application in, for example, tables 6, 7 and 17 and in paragraph [0049]-[0096]. For example, paragraph [0063] discloses an analysis of Table 6 and reveals a 115% increase of UIP, on a CP basis. Table 6 shows a comparison of nutrient values both before and after processing. Applicants respectfully submit that Table 6 shows an example of what UIP/RUP feed source is increased and the initial amount of UIP/RUP that is increased.

Moreover, Applicant respectfully submits that the meaning of the claim language in issue is clear and definite and the Office Action fails to indicate why it is indefinite.

Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Claims 96, 106, 110, 116 and 122 are rejected under 35 USC §112, second paragraph as indefinite. This rejection is respectfully traversed. The claim language is said to be indefinite because the language "wherein the bypass protein level of the end product is adjusted and

16 RJW/vd

Docket No.: 4845-0101PUS1

Page 16 of 29

Docket No.: 4845-0101PUS1

Page 17 of 29

increased" does not make it clear whether the composition is adjusted before it becomes the final product or if Applicant is claiming a second invention.

Applicant respectfully submits that these claims make it clear that what is being adjusted are nutrient values of the end product that is positively recited in the independent claim from which each of these claims depends, and of the very same end product in these dependent claims, i.e., in claims 96, 106, 110, 116 and 122.

Nevertheless, in order to make the meaning of these claims even clearer, without limiting their scope, Applicants propose to amend them to clearly indicate that the RUP/UIP level recited in these dependent claims is the same as the RUP/UIP value recited in the independent claim, from which each of these claims depend. In this regard, claims 96, 106, 110, 116 and 122 have been amended to change "a bypass protein (UIP/RUP) level of the end product that is increased" to read - - a bypass protein (UIP/RUP) level of the end product that is over 50% and up to about 83% of the crude protein is increased - -. This merely adds the "UIP/RUP content of over 50% and up to about 83% of the crude protein" language from the independent claim from which each of these claims depends.

Furthermore, Applicants respectfully disagree with the indication in the Advisory Action that "over 50%" constitutes new matter because claims do not need to be limited to specific upper ranges to satisfy the requirements of 35 USC §112, based on the case law cited above, e.g., the *Ralston Purina* decision and the *In re Smythe* decision. Nevertheless, in order to resolve this issue, Applicants have amended "over 50% to read - - over 50% and up to about 83% - -. Support for this language is found throughout Applicants' originally filed disclosure including, for example, in Table #8, on page 15 just after paragraph [0061] which discloses a value of 82.93%; in Table #14, on page 24, which discloses a value of 82.93%; and in Table # 17, on page 28 just after paragraph [0079], which discloses a value of 82.96%.

Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 97 and 98 stand rejected under 35 USC §112, second paragraph, for various informalities. These rejections have been traversed based on the amendments to these claims that delete the language that is alleged to be indefinite.

Docket No.: 4845-0101PUS1

Page 18 of 29

Reconsideration and withdrawal of these rejections are respectfully requested.

Claims 109-111 and 119-122 stand rejected under 35 USC §112, second paragraph as being incomplete for omitting essential elements, such omission amounting to a gap between the elements, citing MPEP §2172.01. This rejection is respectfully traversed.

The Office Action alleges that the omitted elements are (1) a system for enhancing a nutrient value; (2) a system for determining means; (3) a system for mixing; and (4) a system adjusting means.

This rejection is respectfully traversed.

Firstly, the rejection is not understood, because claims 109-111 and claims 119-122 clearly do recite all of the features that this rejection states are omitted.

Secondly, claims are considered to be definite, as required by the second paragraph of 35 U.S.C. §112, when they define the metes and bounds of a claimed invention with a reasonable degree of precision and particularity. See In re Venezia, 530 F.2d 956, 958, 189 USPQ 149, 151 (CCPA 1976). Applicant's claims 109-111 and 119-122 recite, and only need to recite, those elements which distinguish the invention from the prior art. The definiteness of claim language is analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing ordinary skill in the pertinent art, In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971). Furthermore, the Applicant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought. See in this regard, In re Swinehart, 439 F.2d 210, 160 226 (CCPA 1971).

The recitation in the claims of the various recited elements is clear, and one of ordinary skill in the art can readily determine the metes and bounds of the invention without any further recitations.

The test for compliance with the second paragraph of 35 U.S.C. §112, as stated in Miles Lab., Inc. v. Shandon Inc., 997 F.2d 870, 875, 27 USPQ2d 1123, 1126 (Fed. Cir. 1993), cert. denied, 510 U.S. 1100 (1994) is whether one skilled in the art would understand the bounds of

the claims when read in light of the specification. If the claims, read in light of the specification, reasonably apprise those skilled in the art of the scope of the invention, Section 112 demands no more. See, also, <u>In re Merat</u>, 519 F.2d 1390, 1396, 186 USPQ 471, 476 (CCPA 1975), which stated that the question under Section 112, second paragraph is whether the claim language, when read by a person of ordinary skill in the art in light of the specification, describes the subject matter with sufficient precision that the bonds of the claimed subject matter are distinct. See, also, In re Warmerdam, 33 F3d 1354, 1361, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994).

The second paragraph of 35 U.S.C. § 112 requires claims to be set out and circumscribe a particular area with a reasonable degree of precision and particularity, <u>In re Johnson</u>, 558 F.2d 1008, 1015, 194 USPO 187, 193 (CCPA 1977).

All of Applicant's claims, including rejected claims 109-111 and 119-122, satisfy these requirements.

Moreover, the case cited in MPEP §2172.01 (on which this rejection is based) to require inclusion of essential structural cooperative relationships, <u>In re Mayhew</u>, 188 USPQ 356 (CCPA 1976), has been severely limited by the decisions of the Federal Circuit regarding the very similar <u>Gentry Gallery</u> case, cited below.

This Application is unlike the application in Gentry Gallery, Inc. v. Berkline Corp., 43 USPQ2d 1498 (Fed. Cir. 1998) in which the court's determination that the patent disclosure did not support a broad meaning for the disputed claim was premised on clear statements in the written description that described the location of a claim element - the "control means" - as "the only possible location" and that variations were "outside the stated purpose of the invention", Id. at 1503. The Federal Circuit subsequently held, in Johnson Worldwide Associates Inc. v., Zebco Corp., 50 USPQ2d 1607 (Fed. Cir. 1999) that Gentry Gallery considers the situation where the patent's disclosure makes it crystal clear that a particular (i.e., narrow) understanding of a claim term is an "essential element of [the inventor's] invention." Applicant submits that this decision also limited the applicability of the In re Mayhew decision.

In this regard, Applicant's disclosure <u>never</u> states, or otherwise admits, that any particular feature is an essential element of the invention. Absent such an admission, there is no statutory

19 RJW/vd

Docket No.: 4845-0101PUS1

Page 19 of 29

Docket No.: 4845-0101PUS1

Page 20 of 29

basis to make the requirements set forth in this rejection under 35 U.S.C. §112. Accordingly, the rejection of these claims is improper and should be withdrawn.

Reconsideration and withdrawal of this rejection of claim 5 is respectfully requested.

The Office Action additionally rejects claims 109-111 and 119-122 because the claims recite a system but claim method steps. This rejection is respectfully traversed for a number of reasons.

Claims 109-111 do not recite method steps, nor do claims 119-122. These claims recite a system, which is clearly a statutory class of inventions, e.g. an apparatus, in means-plus-function format, which is clearly authorized by statute.

Moreover, the burden to make out a prima facie case of non-compliance with a statute is on the Office and the Office fails to present any reason why system claims are improper. The statement that these claims do not recite any structural elements is not considered to be a valid reason to reject these claims as indefinite when means-plus-function language, authorized by 35 USC §112, Sixth paragraph, is used.

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejections Under 35 U.S.C. § 103

Claims 84-122 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,824,355 to Hietritter et al. ("Hietritter") in view of U.S. Patent 5, 219,596 to Smith et al. ("Smith"). This rejection is respectfully traversed.

In rejecting claims under 35 U.S.C. § 103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, <u>In re Fine</u>, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in <u>Graham v. John Deere Co.</u>, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. <u>Uniroyal Inc.</u>

Page 21 of 29 051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied,

Docket No.: 4845-0101PUS1

v. F-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). To establish prima facie obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A showing of a suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999). Moreover, a factual inquiry whether there is proper motivation to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See, In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Moreover, it is well settled that a rejection based on 35 U.S.C. § 103 must rest on a factual basis, which the Patent and Trademark Office has the initial duty of supplying. <u>In re GPAC, Inc.</u>, 57 F.3d 1573, 1582, 35 USPQ2d 1116, 1123 (Fed. Cir. 1995).

I. Initially, Applicants note neither of these two applied references discloses or suggests a number of positive features of the claims invention.

Hietritter neither discloses nor suggests a number of positively recited features of the claims for a number of reasons.

Firstly, Hietritter does not disclose or suggest a method for <u>predictably</u> enhancing the nutrient value of distillers, brewers or fermenting grain products, as recited in all pending claims. The rejection never mentions this positively recited "predictable" feature of the claimed invention, which it must do. In this regard, Applicants respectfully submit that, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or

Docket No.: 4845-0101PUS1

Page 22 of 29

claim must be considered in judging the patentability of that claim against the prior art. <u>In re</u> Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). In this regard, Hietritter

taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a

discloses absolutely no concept of <u>predictably</u> enhancing the nutrient value of grain by-products.

Secondly, Hietritter does not (1) determine specific desirable nutrient values of an end product; and (2) creating a distillation and/or fermentation by-product-nutrient source mixture having an enhanced nutrient value by (a) adding one or more crude protein and/or amino acid content nutrient sources comprising canola meal, soybean meal, sunflower meal into the wet end of distillation or fermentation byproducts based on the crude protein, UIP protein, amino acid content, UIP/RUP amino acid content of the added nutrient sources to create an enhanced nutrient value by-product-nutrient source mixture of the distillation or fermentation byproducts; and (b) adjusting the temperature and/or the moisture content of the enhanced nutrient value by-product-nutrient source mixture based on an empirical relationship that relates the UIP as a percent of the crude protein (CP) to an end product temperature to produce said end product with those specific desirable nutrient levels, as claimed. Hietritter does not disclose this combination of features. All that Hietritter performs is step (2). In this regard, Hietritter merely mixes various ingredients, adds water, cooks them, comes up with end products, and measures certain nutrient values. That's it. Hietritter simply does not disclose or suggest performing steps (1) and (3), which are a positively recited part of Applicants' unique processes.

Thirdly, with respect to claim 86, the Office Action does not even address this specific positively recited feature of adjusting UIP as a percent of the crude protein according to a specific recited formula which is nowhere to be found, either explicitly or inherently (i.e., necessarily disclosed) in Hietritter.

Docket No.: 4845-0101PUS1 Page 23 of 29

Fourthly, Smith, the secondary reference in the applied reference combination, fails to disclose or suggest any of the features that are missing from Hietritter. Accordingly, no matter how these references are combined, the resulting reference combination cannot possibly disclose these missing positively recited claimed features.

The Office Action fails to make out a prima facie case that Hietritter, the base reference used in the applied reference combination, discloses a number of positively recited features of the claimed invention.

Moreover, Applicants respectfully submit that following Heitritter's teachings will never result in the claimed invention in the sense that Heitritter never adds any nutrient values to his starting product to increase its nutrient value before heating it or adding water to it, as claimed. In this regard, the Office Action fails to provide objective factual evidence that one of ordinary skill in the art would be properly motivated to modify Heitritter to add any nutrients to his starting product to increase its nutrient value, especially where Heitritter's starting material already has reasonable levels of nutrient values.

Applicants respectfully submit that Applicants' claimed invention involves realizing something that none of the applied art realizes and recites a method that capitalizes on that something, i.e., an empirically derived formula that they realized can be used in the claimed method, whereas neither the knowledge of the existence of the empirical formula not the claimed method never has existed, nor is in any way suggested by, the applied art.

The Office Action continues by admitting that Hietritter does not disclose (1) wet end distillers, brewers or fermenters grain byproducts as a part of the product base, as recited in claims 84, 103, 105, 109, 112, 114, 115 and 119; (2) a specific ratio of wet end distillers grain to soy meal as recited in claim 91; (3) the percentage of RUP that has increased, as recited in claims 87, 96, 106, 110, 116 and 122; (4) a drying temperature of 350-500 degrees Farenheit, as recited in claim 98; and (5) and the parameters and equations as recited in claims 86, 89, 90, 94 and 95.

Actually, these are not all of Hietritter's shortcomings. Hietritter does not (1) predetermine nutrient values of the end product; (2) add any nutrient source that would affect the protein and/or amino acid levels; (3) predict end product UIP level according to temperature achieved during cooking and/or drying, whereas Applicants disclose adjusting the temperature

and/or the moisture content of the enhanced nutrient value by-product-nutrient source mixture based on an empirical relationship that relates the UIP as a percent of the crude protein (CP) to an end product temperature to predictably achieve desired nutrient values, and even recite in claim 86, a specific empirically obtained formula to predict this: UIP(% of CP) = (End product temperature X 0.819) – 107.644; or (4) mention the use of any fermentation products, either wet or dry.

II. In an attempt to remedy Hietritter's admitted deficiencies, the Office Action turns to Smith, which discloses that "by properly adjusting a particular feed composition to deliver essential amino acids in balance post-ruminally, overall production is enhanced and deficiencies and excesses are minimized" – see col. 2, lines 16-19 of Smith. Smith's complete meal feed includes wheat middlings, corn, soybean meal, corn gluten meal, distillers grains or distillers grains with solubles, blood meal, salt, micro-minerals, trace minerals and vitamins and, alternatively, meat and bone meal, fat, sunflower meal, malt sprouts and soybean hulls—see col. 2, lines 31-37. Smith discloses that total supply of the key essential amino acids post-ruminally will depend on body weight and level of milk production of dairy cattle. In order to achieve a feed with the desired key amino acids post-ruminally, Smith simply mixes/blends various ingredients together. No heating or cooking is involved at all.

Despite the fact that Smith only discloses mixing certain ingredients together without cooking to achieve a feed that delivers key essential amino acids post ruminally, the Office Action speculates that one of ordinary skill in the art would turn to Smith to modify Hietritter to include distillers grain in Hietritter's feed. Applicants disagree with this conclusion because of the fundamental differences between these two references, including the significant difference between Hietritter's process, that involves cooking, and Smith's process that clearly does not involve cooking. Other fundamental differences between these references include the fact that Hietritter adds water to a dry mix of oil seed protein (soybean meal) and seed coats (soyhulls) and then cooks and dries the product, whereas Applicants' claimed invention does not add water, but combines wet fermenters grains (distillers or brewers) with a dry nutrient source comprising soybean meal, canola meal or sunflower meal and then heats the material to a predetermined temperature in order to achieve a desired UIP content while going through the drying process.

24 RJW/vd

Docket No.: 4845-0101PUS1

Page 24 of 29

Docket No.: 4845-0101PUS1 Page 25 of 29

Moreover, Smith just adds ingredients together and does not further process them at all. Furthermore, Smith merely discloses ranges of nutrients (crude protein, amino acids and minerals) that would occur at four different product inclusion rates, which are labeled as "complete feed", "blender feed", "concentrate" and "base mix," which are related to overall levels that are desired for the cow, and do not disclose changing nutrient levels of any feed ingredient.

More importantly, a significant aspect of Smith's invention, i.e., the use of ruminally protected synthetic amino acids (see example 17, for example, and note that all claims recite use of synthetic amino acids), would be eliminated if used in Heitritter's process, which heats the product to temperatures that would degrade the protected amino acids. In this regard, Smith explicitly discloses, e.g., in col. 12, lines 38-44, using "synthetic amino acids that are protected against degrading in the rumen." Applicants respectfully submit that synthetic amino acids have to be protected by using a protective coating to prevent the synthetic amino acids from degrading.

Applicants respectfully submit that the Office Action fails to demonstrate by objective factual evidence that that the heating employed by Heitritter would not degrade the synthetic amino acid protective carriers employed by Smith and, for at least this reason, fails to make out a prima facie case that one of ordinary skill in the art would be motivated to modify Heitritter in view of Smith, as suggested, to render the claimed invention obvious. In fact, Applicants respectfully submit that, known protective coatings for synthetic amino acids are not robust enough to protect the synthetic amino acids against excessive heat and moisture as would occur in Heitritter's patent and could not be used in Heitritter's process. Such coatings have to be digestible in the abomasum (true stomach), and the Office Action fails to provide objective factual evidence that such coatings are tough enough to withstand the processing disclosed by Heitritter, and that such protective coatings will be not be lost during Heitritter's processing. Because of this Applicants respectfully submit that the Office Action fails to make out a prima facie case that one of ordinary skill in the art would be motivated to use a combination of Smith's formulations and Heitritter's process to produce products with higher rumen protected synthetic

Docket No.: 4845-0101PUS1 Page 26 of 29

amino acids with any expectation of success. Moreover, to Applicants' knowledge, no one has done this because it just would not work.

Applicants also respectfully submit that another reason that one of ordinary skill in the art would not be motivated to modify Heitritter in view of Smith, as suggested, is because Smith uses ingredients such as protected soybean meal, corn gluten meal and distillers dried grains which have already been cooked prior to being used by Smith to give them rumen protection. Applicants respectfully submit that, because of this, the Office Action fails to demonstrate that one of ordinary skill in the art would be properly motivated to add water and cook them again in Heitritter's process.

Additionally, Smith merely mixes dry ingredients and does not change any parameter of the existing feed ingredients whatsoever, e.g., by adding water or by cooking and cooking, let alone the nutrient values of any particular ingredient, thereby failing to motivate one of ordinary skill in the art to use Smith in a process that changes nutrient values of any of its ingredients.

In view of these considerations, which involve significant differences between the references, and destruction of a significant source of Smith's amino acids if used in Heitritter's process, the Office Action fails to make out a <u>prima facie</u> showing that one of ordinary skill in the art would turn to Smith to modify Hietritter, as suggested. All that is presented regarding motivation is speculation and broad general statements concerning multiple references, which does not constitute objective factual evidence of proper motivation to modify Hietritter as suggested. The best that can be hoped for is that the possibility that one may try using distillers grain in Hietritter, i.e., it may be <u>obvious to try</u> using distillers grain as a base material with no objective factual evidence presented of a reasonable expectation of success.

However, instead of presenting objective factual evidence of a reasonable expectation of success, the Office Action merely speculates that "because Smith teaches how to better customize the feed that one would have a reasonable expectation of success from the combination." Moreover, the Office Action does not present objective factual evidence that the degree of customizing the feed, including without any indication of what parameter is better customized, has anything to do with demonstrating a reasonable expectation of success of Hietritter's process to achieve its stated objective of increased RUP using distillers grain.

Page 27 of 29

Hietritter in view of Smith, which it

Docket No.: 4845-0101PUS1

More importantly, even if it were obvious to modify Hietritter in view of Smith, which it is not for reasons discussed above, Hietritter, as modified, would not disclose or render obvious the claimed invention because Hietritter lacks two of the three positively recited features in the independent claims under rejection.

III. The Office Action further speculates that it would be obvious to one of ordinary skill in the art to include an increase in the amount of RUP depending on the desired final product and the amount of RUP in the starting material (see page 6, last three lines). Unfortunately, absolutely no factual evidence, let alone any objective factual evidence, is presented to support this speculative conclusion. Moreover, as pointed out above, both applied references fail to contain a disclosure of several positively recited features, including the predictability feature and steps (1) and (3), as discussed above. In other words, this speculative conclusion attempts to make something out of nothing, i.e., lack of disclosure, but that is not logically possible. Accordingly, this speculative conclusion is improper and should be withdrawn.

IV. With respect to the UIP as a percentage of the crude protein that is recited in claims 86, 96, 106, 110, 116 and 112, the claimed percentages are simply not disclosed nor are they obvious. The only stated basis for rejection these claims under 35 USC §103(a) rests on the "112 rejections above." That rejection indicated that it was unclear what RUP source feed is increased and what initial amount of RUP is increased. In this regard, Applicants respectfully submit that the initial RUP is what is in the created distillation and/or fermentation by-product-nutrient source mixture recited in those claims. The claimed percentages of the UIP as a percentage of the crude protein is simply not disclosed or suggested by Hietritter.

V. With respect to the claimed range of 350 to 500 degrees Farenheit, Hietritter teaches away from using the claimed temperature range, because Hietritter sets upper limits on its temperature range to avoid overcooking. The only way that Hietritter could reach the claimed temperature range would be to shorten the time of cooking, which is taught by Applicants but neither disclosed nor suggested by Hietritter. The conclusion that it would be obvious to achieve the claimed temperature range overlooks the fact that Hietritter presents no clue to a skilled worker of how its invention would not be overcooked at the claimed temperature range. In other

Docket No.: 4845-0101PUS1 Page 28 of 29

words, there is not enough disclosure in either Hietritter, or Smith (which does not even use cooking) to render the claimed temperature range obvious. This is also another reason why the proposed use of distillers grains would not be obvious to use in Hietritter.

VI. Furthermore, with respect to claim 86, this claim recites more than a specific range. Claim 86 positively recites that the UIP as a percent of the crude protein is adjusted according to a specific formula – which is nowhere disclosed or suggested by any of the applied art.

VII. Additionally, with respect to claims 86, 89, 90, 94 and 95, the Office Action says that because it is not equipped to manufacture the product, the burden shifts to Applicants to demonstrate that the prior art product used in rejecting the claimed invention is different. While Applicants disagree with this proposition that the burden shifts to Applicant because the Office does not have the wherewithal to test the products disclosed or suggested by the Hietritter/Smith reference combination, no case law is presented to support this unique argument, which is contrary to all of the case law cited above. In fact, it is contrary to the established case law cited above.

VIII. Moreover, as noted above, claim 86 recites more than a specific range of values. Claim 86 positively recites that the UIP as a percentage of the crude protein is adjusted according to a particular empirically established formula determined by Applicants that is neither disclosed nor suggested by either of the applied references. In this regard, it is instructive to note that the claimed ranges in these claims under rejection are readily obtainable because of Applicants' invention and are not contemplated by either of the applied references, neither of which discloses any understanding of the claimed invention.

IX. A fair balanced review of the applied art reveals that neither applied reference comes close to disclosing or suggesting Applicants' claimed invention because, for example, neither applied reference (1) predetermines nutrient values of an end product; or (2) predicts end product UIP level according to temperature achieved during cooking and/or drying. Accordingly, even if one of ordinary skill in the art were properly motivated to combine these two references is some way (which they are not, at least for reasons discussed above), the resultant modification of Hietritter would not result in, or render obvious, the claimed invention.

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Additional Cited References

Because the remaining references cited by the Examiner have not been utilized to reject the

claims, but have merely been cited to show the state of the art, no comment need be made with

respect thereto.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or

rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently

outstanding rejections and that they be withdrawn. It is believed that a full and complete response

has been made to the outstanding Office Action, and as such, the present application is in condition

for allowance.

If the Examiner believes, for any reason, that personal communication will expedite

prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration

No. 46,472, at (703) 205-8076, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies,

to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional

fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: October 2, 2006

Respectfully submitted,

Robert J. Webster

Registration No.: 46,472

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road, Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant